

Soil Health

CASE STUDY

Leon Moses has transformed the farm he operates. More importantly, he has also transformed his thinking. He no longer sees the soil as just a medium for producing crops. Instead, he sees a living soil that's the focus of his operation. "I'm doing something good for the soil, and in turn the soil rewards me with yields that don't even compare to what we used to have," says the superintendent of the 492-acre North Carolina A&T State University farm. Moses began experimenting with no-till and strip till farming 25 years ago as a research technician. "I saw what happened there and decided no-till was the right thing to do. When I became superintendent in 2004, we began using no-till for all our corn and soybeans," he says.

In 2006, he added cover crops — not for what they could do for the soil, but because he had a shortage of hay for the farm's livestock. "But I began to learn very quickly that no-till and cover crops combined to make healthy soils that rewarded me with higher yields," Moses says.

Now, he uses no-till and cover crops on 100 percent of his operation. "In 2004, some soybean yields were at 25 bushels an acre. Now we can easily get 65 bushels per acre of soybeans," he says. "It used to take 40 acres of corn to fill our silo and now we only have to cut 10 acres of corn to fill the silo. We were getting 10 tons per acre of silage and now it's 22 tons an acre. The yield we used to get just doesn't begin to compare with what we get now."

"The return on my investment on this farm is easily a 35-percent to 45-percent increase, and we get three or four times more production," Moses says. "It's the best way to go. The proof is always in the pudding."

More information on soil health in North Carolina, including a video with Leon Moses, can be found here: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/nc/soils/health/>.



Corn emerging through a terminated cover crop on the North Carolina A&T State University farm near Greensboro. Photo courtesy of USDA NRCS.